



PUBLIC NOTICE

File Number: NRS 14.264

Pursuant to Chapter 0400-40-07 of the Department's rules, the proposed activity described below has been submitted for approval under an Aquatic Resource Alteration Permit (this also includes §401 Water Quality Certifications). This notice is intended to inform interested parties of this permit application and to ask for comments and information necessary to determine possible impacts to water quality. No decision has been made whether to issue or deny this application.

APPLICANT: David Linkous
455 Satterfield Road
(865) 942-8263

LOCATION: 455 Satterfield Road
Luttrell, Union County, TN
Impact 1: Latitude: 36.182127 Longitude: -83.845983

PROJECT DESCRIPTION: The applicant proposes to stabilize three separate segments of the right descending bank of Bull Run Creek, totaling approximately 515 linear feet; a 49 linear foot segment of the right descending bank of an unnamed tributary to Bull Run Creek and a 58 linear foot segment of the left descending bank of an unnamed tributary to Bull Run Creek adjacent to 455 Satterfield Road, Union County TN. The proposed project will utilize riprap on the toe of the bank and a riparian buffer preserved to the greatest extent possible.

DEGRADATION: In accordance with the Tennessee Antidegradation Statement (Rule 0400-40-03-.06), the division has determined that the proposed activities will not result in degradation to water quality.

WATERSHED / WATERBODY DESCRIPTION: Bull Run Creek is a tributary to the Lower Clinch River and originates in Union County in agricultural and forestlands and flows southwesterly through agricultural and forestlands to its confluence with the Lower Clinch just downstream of Oak Ridge. The Lower Clinch River watershed encompasses portions of 8 counties and drains approximately 631 square miles. For more information on this watershed, please visit <http://www.tn.gov/environment/water/watersheds/lower-clinch-river.shtml>.

Stream Name / ID #: Bull Run Creek (TN06010207014_1000)
Ecoregion: Southern Limestone/Dolomite Valleys and Low Rolling Hills (67f)
Stream Dimension: Channel bottom width: approximately 30 feet
Chanel top width: approximately 40 feet
Water depth: approximately 1.5 – 5 feet
Bank height: approximately 6 - 12 feet
Substrate: Unconsolidated sediments, small amounts of cobble and transient littoral gravel bars.

Designated Use	Use Support	Causes
Fish and aquatic life	Fully Supporting	Escherichia coli
Recreation	Not Supporting	
Irrigation	Fully Supporting	
Livestock watering & wildlife	Fully Supporting	

Assessment Date: 2011

PERMIT COORDINATOR: Mark Jordan

FACTORS CONSIDERED: In deciding whether to issue or deny a permit, the department will consider all comments of record and the requirements of applicable federal and state laws. In making this decision, a determination will be made regarding the lost value of the resource compared to the value of any proposed mitigation. The department shall consider practicable alternatives to the alteration. The department shall also consider loss of waters or habitat, diminishment in biological diversity, cumulative or secondary impacts to the water resource, and adverse impact to unique, high quality, or impaired waters.

COMMENTING: Persons wishing to comment on the proposal are invited to submit written comments to the department. Written comments must be received within **thirty days of the date that this notice is posted**. Comments will become part of the record and will be considered in the final decision. The applicant's name and permit number should be referenced. Send all written comments to the department's address listed below and to the attention of the permit coordinator.

PUBLIC HEARING: Interested persons may request in writing that the department hold a public hearing on this application. The request must be filed within the comment period, indicate the interest of the person requesting it, the reasons that the hearing is warranted, and the water quality issues being raised. When there is sufficient public interest in water quality issues, the department will hold a public hearing. Send all public hearing request to the department's address listed below and to the attention of the permit coordinator.

APPEAL: A permit appeal may be filed, pursuant to T.C.A. §§ 69-3-105(i) and Rule 0400-40-03-.12, by the permit applicant or by any aggrieved person who participated in the public comment period announced by this notice. This petition must be filed within THIRTY (30) DAYS after public notice of the issuance of the permit. The petition must specify what provisions are being appealed and the basis for the appeal. It should be addressed to the technical secretary of the Tennessee Board of Water Quality, Oil and Gas at the following address: Tisha Calabrese Benton, Director, Division of Water Resources, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Ave, 12th floor, Nashville, TN. Any hearing would be in accordance with T.C.A. §§69-3-110 and 4-5-301 et seq.

FILE REVIEW: The permit application, supporting documentation including detailed plans and maps, and related comments are available at the department's address (listed below) for review and/or copying.

Tennessee Department of Environment & Conservation
Division of Water Resources, Natural Resources Unit
ATTN: Mark Jordan
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 11th Floor
Nashville, Tennessee 37243

2014 AUG 19 AM 9:09



Graveston, TN Quadrangle (146-NE)
USGS Topographic Maps
Original Map Scale 1" = 2000'
(Latitude N 36° 10' 55.65" Longitude W 83° 50' 45.539")

[illegible]

DAVID LINKUS FARM
STREAM BANK STABILIZATION
UNION COUNTY, TENNESSEE

Prepared By:
U.S. Department of Agriculture
Natural Resources Conservation Service
Knoxville Area Office
Knoxville, TN

In Cooperation With:
Union County Soil Conservation District

INDEX TO DRAWINGS

1. COVER SHEET
2. PLAN VIEW OF SITE
3. TYPICAL RIPRAP - SECTION A-A AND B-B
4. TYPICAL RIPRAP - SECTION C-C
5. TYPICAL RIPRAP - SECTION D-D
8. TYPICAL RIPRAP - SECTION E-E

Tennessee 811
Know what's below.
Call before you dig.

IMPORTANT:
Utility Owners Must Be Notified Of The Date And Time Construction Is Scheduled To Approach The Utilities (Pipelines, Telephone Lines, Electric Lines, etc.) Construction Should Not Commence Until All Utility Companies Have Been Notified And Have Their Utilities Located On The Ground.

All structures shall be isolated and stored in the field by the MFCOS Area 4 Engineering Staff prior to the start of construction. Area 4 Engineering Staff shall be present during construction and final checkout.

CONSTRUCTION DRAWINGS APPROVED
ph.zimmerman@usda. Digitally signed by Joseph A. Zimmerman

gov
 AGRICULTURAL ENGINEER, NRCS
 ELIZABETHTON, TENNESSEE
 DATE

Shelf	1	Inventory Map
		A4E-14-116

Sheet 1 of 6

David Linkus Farm
Stream Bank Stabilization
Union County, Tennessee
Cover Sheet

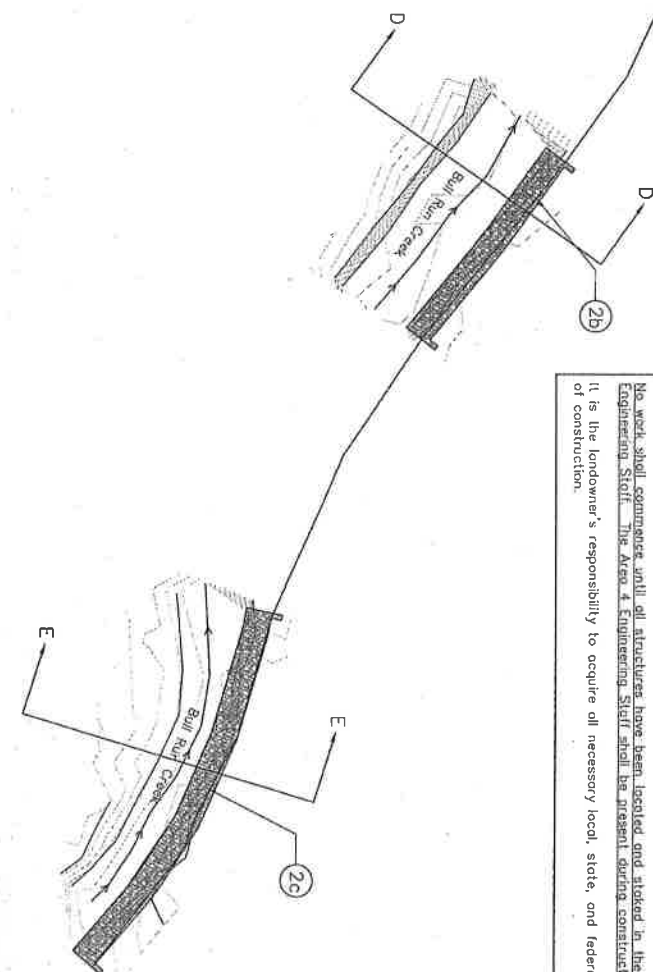
	Date
Designed <u>Morrow / Zimmerman</u>	<u>02/14</u>
Drawn <u>JC Zimmerman</u>	<u>02/14</u>
Checked <u>JA Morrow</u>	<u>02/14</u>
Approved _____	



Natural Resources Conservation Service
United States Department of Agriculture

Links

AUG 22 2014



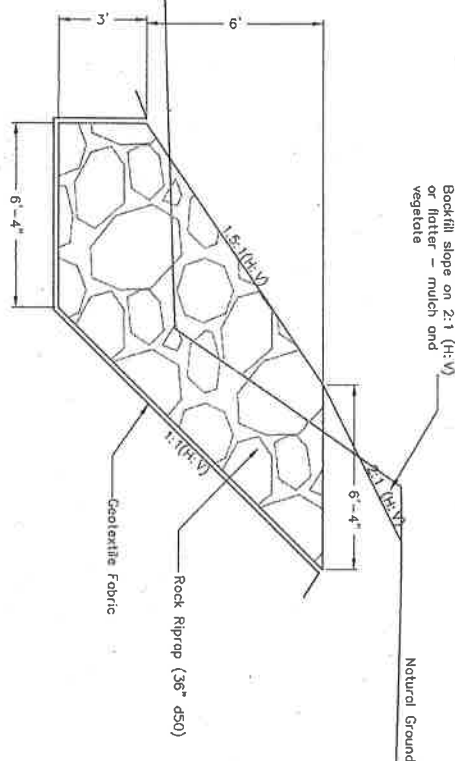
- Items of Work:**
- 1) Rock Riprap - Toe Armoring - This item consists of two (2) sections of rock riprap along a one hundred and eight (108) foot section of channel on opposite sides of an Un-Named Tributary to Bull Run Creek. Section 1a is on the right bank downstream of a culvert crossing and is forty-nine (49) feet long. Section 1b is fifty-eight (58) feet long and is on the left bank immediately upstream of Section 1a. Both sections are three (3) feet tall and use a rock with a d50 of twelve (12") inches. Details of rock riprap toe armoring are shown on Sheet 3 of 6.
 - 2) Rock Riprap - Toe Armoring - This item consists of three (3) sections of rock riprap along an eight hundred and ninety-three (893) foot section Bull Run Creek. Section 2a is on the right bank upstream of the junction with the tributary is one hundred and forty-four (144) feet long. Section 2b is one hundred and thirty-six (136) feet long and is upstream of Section 1a. Section 2c is two hundred and thirty-five (235) feet long and is upstream of Section 2b extending to the end of the property. All three (3) sections are six (6) feet tall and use a rock with a d50 of twelve (12") inches. Details of rock riprap toe armoring are shown on Sheets 4, 5 and 6 of 6.
- Erosion Control Measures shall as stated in the appropriate permit application but shall include, but not be limited to, the following:**
- a) Work shall take place from the bank. No equipment shall be operated in the flowing channel.
 - b) Water shall be diverted by temporary rock or berm placement so that water does not flow down excavated key trenches during construction of Rock riprap bank armoring.
 - c) No exposed material or site shall be left overnight with out placement of temporary erosion control measures or geotextile fabric.
 - d) All excavated areas shall be seeded and mulched upon completion.
- No work shall commence until all structures have been located and staked in the field by the Area 4 Engineering Staff. The Area 4 Engineering Staff shall be present during construction and at final inspection. It is the landowner's responsibility to acquire all necessary local, state, and federal permits prior to the start of construction.**

Rock Riprap:

- 1) Rock size shall be a d50 of thirty-six (36") inches - This means that fifty (50%) percent of the rock used shall be thirty-six inches or larger. No rock smaller than twenty-four (24") inches shall be used and no rock larger than forty-eight (48") inches shall be used.
- 2) Rock shall be placed on prepared surface with 1.5:1 (H:V) front face slope and a 1:1 (H:V) rear/bank face slope. All roots, rocks or other material that may damage geotextile shall be removed from the prepared slope.
- 3) Geotextile used shall be eight (8 oz/sy) ounce per square yard non-woven needle punched geotextile. Geotextile shall overlap a minimum of twenty-four (24") inches with overlap not to exceed thirty-six (36") inches.
- 4) Riprap shall be keyed into the channel bed a minimum of three (3) feet deep or until non-excavatable bedrock is encountered.
- 5) Any void areas behind the rock riprap shall be backfilled to match existing natural bank upstream and downstream of the section damaged by livestock activity.
- 6) Any fill material required extending above the completed elevation of the top of the rock riprap shall be sloped back on a 2:1 (H:V) slope, or flatter, and vegetated as directed by the District Conservationist.
- 8) Any excavated materials in excess of material required in backfill behind or above the rock riprap forming SHALL be removed from site and disposed of out of the influence of river per permit requirements.

Typical Rock Riprap (Material and Placement)				
Riprap Section	Riprap Length (ft)	Height (ft)	Rock (tons) d50 36"	Geotextile (sy) 8 oz/sy
Item 2b	136.0'	6.0'	610 (357 cy)	428
				357

Typical Riprap Section
(Cross Section D-D - Left Bank)



No work shall commence until all structures have been located and plotted in the field by the Area 4 Engineering Staff. The Area 4 Engineering Staff shall be present during construction and at final inspection.



David Linkus Farm
Stream Bank Stabilization
Union County, Tennessee
Typical Rock Riprap - Section D-D

Designed	Morrow / Zimmerman	Date	02/14
Drawn	JC Zimmerman		02/14
Checked	JA Morrow		02/14
Approved			

FILE NAME
Drawing
DRAWING NUMBER
A4E-14-120
Sheet 5 of 6

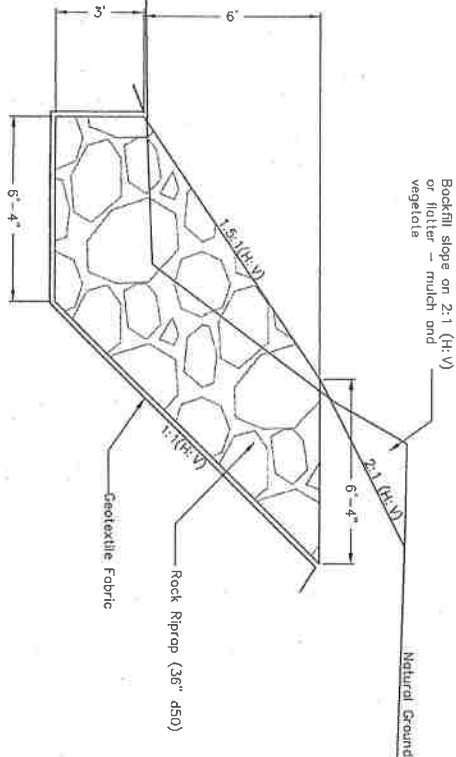
Rock Riprap:

- 1) Rock size shall be a d50 of thirty-six (36") inches - This means that fifty (50%) percent of the rock used shall be thirty-six inches or larger. No rock smaller than twenty-four (24") inches shall be used and no rock larger than forty-eight (48") inches shall be used.
- 2) Rock shall be placed on prepared surface with 1.5:1 (H:V) front face slope and a 1:1 (H:V) rear/bank face slope. All roots, rocks or other material that may damage geotextile shall be removed from the prepared slope.
- 3) Geotextile used shall be eight (8 oz/sy) ounce per square yard non-woven needle punched geotextile. Geotextile shall overlap a minimum of twenty-four (24") inches with overlap not to exceed thirty-six (36") inches.
- 4) Riprap shall be keyed into the channel bed a minimum of three (3') feet deep or until non-excavatable bedrock is encountered.
- 5) Any void areas behind the rock riprap shall be backfilled to match existing natural bank upstream and downstream of the section damaged by livestock activity.
- 6) Any fill material required extending above the completed elevation of the top of the rock riprap shall be sloped back on a 2:1 (H:V) slope, or flatter, and vegetated as directed by the District Conservationist.
- 8) Any excavated materials in excess of material required in backfill behind or above the rock riprap armoring SHALL be removed from site and disposed of out of the influence of river per permit requirements.

Typical Rock Riprap (Material and Placement)				
Riprap Section	Riprap Length (ft)	Height (ft)	Rock (tons) d50 36"	Geotextile (sy) 8 oz/sy
Item 2c	235.0"	6.0'	1,047 (616 cy)	642
				Excavation (cy) 616

No work shall commence until all structures have been located, and staked in the field by the Area 4 Engineering Staff. The Area 4 Engineering Staff shall be present during construction and at final inspection.

Typical Riprap Section
(Cross Section E-E - Left Bank)



David Linkus Farm
Stream Bank Stabilization
Union County, Tennessee
Typical Rock Riprap - Section E-E

Designed	Morrow / Zimmerman	Date	02/14
Drawn	JC Zimmerman		02/14
Checked	JA Morrow		02/14
Approved			

FILE NAME
Linkus.dwg
DRAWING NUMBER
AAE-14-116
Sheet 5 of 6

AUG 22 2014



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